UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,871	12/29/2000	Yunus Mohammed	M61.12-0334	8553

27366	7590	11/01/2005

MICROSOFT CORPORATION C/O WESTMAN
CHAMPLIN & KELLY, P.A.
SUITE 1400 - INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER
OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 August 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-31_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-31_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed. Examiner suggests including a

reference to speech applications in the title.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Burrows</u>

(6021409) in view of <u>Sarukkai et al (5819220)</u>.

        As per claims 1,27, <u>Burrows (6021409)</u> teaches:

                "receiving a word list.....word list" as receiving word list from paring module

        containing words as well as their contents (col. 6 lines 60-67)

"selecting word from the word list" as choosing the word (col. 11 lines 14-16)

"generating an index.....word" as index corresponding to the word (col. 11 lines

4-7)

"encoding the selected word.....data" as encoding the words (col. 12 lines 50-63;

col. 14 lines 48-55)

"writing the encoded word.....memory" as storing the entries (col. 12 lines 50-

67).

Burrows (6021409) does not explicitly teach using the word techniques in a

speech related application (Burrows (6021409) teaches the use of the word techniques in

an internet environment), however, Sarukkai et al (5819220) teaches using word list

techniques in web based speech applications (Fig. 3, subblock 32,40,42, interacting with

a speech recognition engine, subblock 36). Therefore, it would have been obvious to one

of ordinary skill in the art of internet information portals to adapt the teachings of

Burrows into speech related web applications because it would advantageously tailor the

speech enabled sites to specific vocabularies (Sarukkai et al (5819220), col. 3 lines 39-

45).

As per claim 2, Burrows (6021409) teaches:

"repeating the steps.....data" as feedback loop for the next word (fig. 2, subblock

59, back to subblock 130, to repeat the page and parsing module)

As per claims 3,22,26,30, Burrows (6021409) teaches:

"writing the codebooks....lexicon memory" as stored data structure with an index format and pointer (col. 13 lines 24-32, lines 45-51) can be considered as a codebook.

As per claim 4, Burrows (6021409) teaches:

"counting the words....word list" as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55)

As per claim 5, Burrows (6021409) teaches:

"determining....memory" as using index and pointers for the next available locations (col. 13 lines 45-50)

As per claim 6, Burrows (6021409) teaches:

"calculating.....hash table" as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

As per claim 7, Burrows (6021409) teaches:

"writing an offset.....memory" as computing a delta value as an offset (col. 11 line 65 – col. 12 line 6).

As per claim 8, Burrows (6021409) teaches:

"providing...word encoders" as compressing the word entries based on delta values (col. 11 line 40 – col. 12 line 26; encoding)

"providing....data encoders" as word list with domains such as attributes, and

encoding based on that information (col. 9 lines 21-29)

As per claim 9, <u>Burrows (6021409)</u> teaches Huffman coding (col. 12 lines 45-47)

As per claims 10,27, <u>Burrows (6021409)</u> teaches:

"writing a data structure.....dependent data" as hash encoding used (col. 14 lines

48-58) including content (col. 7 lines 58-63; col. 8 lines 19-26)

"wherein each word dependent data portion....portion" as indicating the word an

location pairs (including content -- col. 7 line 65 – col. 8 line 53)

As per claim 11, <u>Burrows (6021409)</u> teaches:

"writing a data structure....separator" as words and their representations have a

separator (col. 6 lines 56-67)

As per claim 12, <u>Burrows (6021409)</u> teaches:

"receiving the word....word information" as searching the index, accessing and

decoding (col. 5 lines 15-35, and col. 6 lines 17-42)

As per claim 13, <u>Burrows (6021409)</u> teaches:

"prior to reading......word" as verifying the candidate for the query (col. 6 lines

34-37)

As per claim 14, <u>Burrows (6021409)</u> teaches:

"reading a plurality.....information" as reading words as well as marks (col. 7 lines 13-23)

As per claims 15,21,28, <u>Burrows (6021409)</u> teaches:

"plurality of fields.....associated field" as reading the attributes (Col. 9 lines 21-29)

As per claims 16,21,25,29, <u>Burrows (6021409)</u> teaches:

"reading a last field....received word" as reading a zero to indicate the end of the encoding (col. 12 lines 13-15)

As per claim 17, <u>Burrows (6021409)</u> teaches:

"initializing......information" as initializing the readers for each searched word (col. 20 lines 52-67)

As per claim 18, <u>Burrows (6021409)</u> teaches:

"calculating a hash value....lexicon" as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

As per claims 19,23, <u>Burrows (6021409)</u> teaches:

"a compressed lexicon.....builder" as word list with domain such as attributes

(Col. 9 lines 21-29)

"a plurality of domain encoders....data" as compressing the word entries based on

delta values (Col. 11 line 40 – col. 12 line 26)

"a hashing component.....word list" as using index and pointers for the next

available locations (col. 13 lines 45-50)

"a hash table generator.....lexicon memory" as using hash encoding to evenly

distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

"a lexicon memory....word" as using index and pointers for the next available

locations (col. 13 lines 45-50);using hash encoding to evenly distribute over the buckets

(col. 14 lines 48-55; and Figs. 9 and 10)) and computing a delta value as an offset (col. 11

line 65 – col. 12 line 6).

As per claims 20,24, Burrows (6021409) teaches:

"lexicon memory generator....memory" as words and their representations have a

separator (col. 6 lines 56-67).

As per claim 31, Burrows (6021409) teaches an index and pointer tied in with the word

portions as using index and pointers for the next available locations (col. 13 lines 45-50) and

using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and

10)).

Response to Arguments

4.   Applicant's arguments received 8/22/05 have been fully considered but they are not

persuasive. Applicant's arguments with respect to the Burrows reference not being a lexicon for

a speech application, examiner argues that applicant is arguing the specification, and not the

scope of the claim language. Examiner notes that in the claims, the only mention of a speech

application appears in the preambles "for use in a speech application; this phrase does not have

patentable weight since the phrase appears in the preamble and is not reinforced in the body of

the claim. On the bottom of page 2 of the response (and continuing to page 3 of the response),

applicant repeats a similar argument for the Sarukkai reference. Again, examiner notes that the

currently claimed phrase "for use in a speech application" has no patentable weight.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Opsasnick, telephone number (571)272-7623,

who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mr. Wayne Young, can be reached at (571)272-7582. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno
10/28/05

W.R. YOUNG
PRIMARY EXAMINER